UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,464	01/23/2004	Yoshinori Okajima	108391-00037	5470

4372 7590 10/04/2004

ARENT FOX KINTNER PLOTKIN & KAHN
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER	
HUYNH, KIM NGOC	
ART UNIT	**PAPER NUMBER**
2182	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/762,464	OKAJIMA, YOSHINORI	
	Examiner	Art Unit	
	Kim Huynh	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/820,716.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-10 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-10 of prior U.S. Patent No. 6,701,396. This is a double patenting rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation the self-oscillation circuit self-oscillates at a frequency which is higher than the frequency of a clock signal. However, the self oscillation circuit as disclosed by applicant does not require a clock signal. There is no

element in the circuit for generating the clock signal and therefore the clock signal is not part of the oscillation circuit. It is unclear what applicant intends by this limitation.

Correction/clarification required.

5. The following rejections are made based on the examiner's best interpretation of the claims in light of the 35 USC 112 rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being obvious over Abughazaleh (US 6,184,813) in view of Aoyagi et al. (US 6,335,696).

Abughazaleh discloses a oscillation circuit 250 (Fig. 3) comprising a self-oscillation circuit (ring oscillator 420, see Fig. 5, col. 7, ll.7-15) which self-oscillates, a frequency divider 312 which outputs n (n >2) timing signals of mutually different phases (S1-Sn, see Fig.), based on an output signal (PH1-PH2) of said self-oscillation circuit 310; and a control circuit (trigger circuit 410, Fig. 5) which controls the operation of said self-oscillation circuit and said frequency divider based on a starting signal (SYNCH/START) and a timing signal output from said frequency divider (STOP, col. 5, ll. 28-34).

Abughazelah does not explicitly disclose the use of the oscillation circuit 250 with serial/parallel converter. However, Abughazaleh discloses that the oscillation circuit 250 is used to synchronize the arrival of data signal (bits) at the output terminals of a digital to analog circuit as well as microprocessor, controller or integrated circuits (col. 2, ll. 3-32 and col. 9, ll. 19-26).

Aoyagi discloses using a clock generator having tap signal generator for providing different delays similar to that of Abughazelah in order to insure timing between data and clocks in both serial/parallel and parallel/serial converters (col. 1, ll. 4-8, 21-32 and col. 2, ll. 46-55). It would have been obvious to one having ordinary skill in the art to utilizing the oscillator circuit of Abughazelah in order to provide clock signals having pre-selected delay to compensate for data propagation since both Aoyagi and Abughazelah are concerned with synchronizing data bits arriving at the flipflop/latches of the data converter and the oscillator of Abughazelah is fully capable of being used with either digital/analog or serial/parallel converters.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being obvious over Abughazaleh in view of in view of Aoagi as discussed above and further in view of applicant's admitted prior art (APA, paragraph 3) as best under stood in view of the 35 USC 112 second paragraph above.

Abughazaleh discloses a oscillation circuit 250 (Fig. 3) and Aoyagi discloses that the need for using the oscillator circuit with pre-selected delayed signals in high speed parallel/serial converter as described above. As for the limitation the self-oscillation circuit oscillates at a frequency which is higher than the frequency of a clock signal,

APA discloses that it is desired to transfer data in synchronism with a high speed clock signal by generating a high speed clock using a PLL to accommodate for high speed data transfer (paragraph 3). It would have been obvious to one having ordinary skill in the art to implement any frequency for the output of the oscillator 410 of Abughazaleh in order to accommodate for the desired speed of the data transferred as applicable since the oscillator Abughazelah is self-contain and does not depend on the system clock speed (see Fig. 5).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yano (US 5,798,720), Ogasawara et al (US 6,154,246), Usui (US 6,469,583), Garmire et al. (US 6,185,693), and Fukazawa (US 6,259,387) disclose various clock generator signals to synchronize data signals of parallel/serial converters.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571) 272-4247.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kim Huynh
Primary Examiner
Art Unit 2182

KH
9/28/04